

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Please amend claims 43, 70, and 84 as follows:

1-42. (Canceled).

43. (Currently amended) An electrical power transmission line comprising:
at least one electrical cable;
at least one shielding element comprising a plurality of shielding modules arranged side by side, each shielding module made of at least one ferromagnetic material arranged in a radially outer position with respect to said at least one cable for shielding the magnetic field generated by said cable, each of said plurality of shielding modules comprising a base and a cover, the base comprising a bottom wall, a pair of side walls, and a pair of flanges integral with the base and extending in a predetermined direction from the end portions of the side walls; and
at least one supporting element coupled to at least one of said bases.

44. (Previously presented) The electrical power transmission line according to claim 43, wherein said at least one cable comprises three cables arranged according to a trefoil arrangement.

45. (Previously presented) The electrical power transmission line according to claim 43, wherein said line is placed underground.

46. (Previously presented) The electrical power transmission line according to claim 43, wherein said base and said cover are substantially continuous.

47. (Canceled).

48. (Previously presented) The electrical power transmission line according to claim 43, wherein said bottom wall and said pair of side walls are substantially flat.

49. (Previously presented) The electrical power transmission line according to claim 43, wherein said side walls extend in a direction substantially perpendicular to said bottom wall.

50. (Canceled).

51. (Previously presented) The electrical power transmission line according to claim 43, wherein said flanges extend outwardly from the end portions of the side walls of the base.

52. (Canceled).

53. (Previously presented) The electrical power transmission line according to claim 43, wherein said flanges extend in a direction substantially perpendicular to the end portions of the side walls of the base.

54. (Previously presented) The electrical power transmission line according to claim 43, wherein said cover is substantially continuous.

55. (Previously presented) The electrical power transmission line according to claim 54, wherein said cover comprises a main wall and a pair of flanges extending from the main wall in a predetermined direction.

56. (Previously presented) The electrical power transmission line according to claim 55, wherein said flanges extend in a direction substantially perpendicular to said main wall.

57. (Previously presented) The electrical power transmission line according to claim 43, wherein said base and said cover comprise walls having a thickness of about 0.20 mm to about 0.35 mm.

58. (Previously presented) The electrical power transmission line according to claim 43, wherein said base and said cover comprise respective sides superimposed for a portion of predetermined length in lateral direction.

59. (Canceled).

60. (Canceled).

61. (Canceled).

62. (Previously presented) The electrical power transmission line according to claim 43, wherein said shielding modules are longitudinally superimposed for a portion of predetermined length.

63. (Previously presented) The electrical power transmission line according to claim 62, wherein said predetermined length is 25% to 100% of the width of said shielding element.

64. (Previously presented) The electrical power transmission line according to claim 43, further comprising a respective connecting element made of ferromagnetic material for connecting said shielding modules arranged side by side.

65. (Previously presented) The electrical power transmission line according to claim 43, wherein, in each of said shielding modules, said base and said cover are reciprocally staggered in longitudinal direction by a predetermined distance.

66. (Previously presented) The electrical power transmission line according to claim 43, wherein, in each of said shielding modules, said base is coupled to a respective supporting element.

67. (Previously presented) The electrical power transmission line according to claim 43, wherein at least two adjacent shielding modules extend along different directions, said shielding element further comprising a respective connecting element made of ferromagnetic material for connecting said at least two adjacent shielding modules.

68. (Previously presented) The electrical power transmission line according to claim 43 or 67, wherein said ferromagnetic material has a maximum value of relative magnetic permeability greater than about 20000.

69. (Previously presented) The electrical power transmission line according to claim 43 or 67, wherein said ferromagnetic material has a maximum value of relative magnetic permeability μ_{\max} of about 20000 to about 60000.

70. (Currently amended) The electrical power transmission line according to claim 43 or 67, wherein said ferromagnetic material is selected from the group of: grain oriented silicon steel, nickel-iron magnetic alloy, nickel-molybdenum-iron alloy, and non-grain oriented silicon steel.

71. (Previously presented) The electrical power transmission line according to claim 70, wherein the silicon content is about 1% to about 5%.

72. (Previously presented) The electrical power transmission line according to claim 43, wherein, in each of said shielding modules, said base is made of a first ferromagnetic material having a maximum value of relative magnetic permeability μ_{\max} greater than about 40, and wherein said cover is made of a second ferromagnetic material having a maximum value of relative magnetic permeability μ_{\max} greater than about 20.

73. (Previously presented) The electrical power transmission line according to claim 43, further comprising a supporting element coupled to at least one of said covers.

74. (Previously presented) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element is arranged in a radially outer position with respect to said at least one shielding element.

75. (Previously Presented) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element is arranged in a radially inner position with respect to said at least one shielding element.

76. (Previously presented) The electrical power transmission line according to claim 43 or 73, wherein at least one of said plurality of shielding modules is interposed between a pair of supporting elements.

77. (Previously presented) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element is substantially flat.

78. (Previously presented) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element comprises a respective wall having a thickness of about 1 to about 20 mm.

79. (Previously presented) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element is made of an electrically non-conductive and non-ferromagnetic material.

80. (Previously presented) The electrical power transmission line according to claim 79, wherein said electrically non-conductive and non-ferromagnetic material is selected from the group of: plastics materials, cement, terracotta, carbon fibres, glass fibres, and wood.

81. (Previously presented) The electrical power transmission line according to claim 80, wherein said plastics materials are selected from the group of: polyethylene (PE), low-density polyethylene (LPDE), medium-density polyethylene (MPDE), high-density polyethylene (HPDE), linear low-density polyethylene (LLPDE), polypropylene (PP), ethylene/propylene elastomer copolymers (EPM), ethylene/propylene/diene terpolymers (EPDM), natural rubber, butyl rubber, ethylene/vinyl copolymers, ethylene/acrylate copolymers, ethylene/ α -olefin thermoplastic copolymers, polystyrene, acrylonitrile/butadiene/styrene resins (ABS), halogenated polymers, polyurethane (PUR), polyamides, aromatic polyesters.

82. (Previously presented) The electrical power transmission line according to claim 43, wherein said shielding element further comprises a plurality of fixing means longitudinally arranged at predetermined distances from each other, said fixing means being intended to fix said covers on said bases.

83. (Previously presented) The electrical power transmission line according to claim 82, wherein said fixing means are arranged in a plurality of pairs positioned along the sides of the shielding element at a reciprocal longitudinal distance of about 20 to about 100 cm.

84. (Currently amended) A method for shielding the magnetic field generated by an electrical power transmission line comprising at least one electrical cable, comprising the following steps of:

providing at least one shielding element comprised of a plurality of shielding modules arranged side by side, each shielding module made of at least one ferromagnetic material for shielding the magnetic field generated by at least one electrical cable, each of said shielding modules comprising a base and a cover, the base comprising a bottom wall and a pair of side walls, the cover comprising a main wall, and either the base comprising a pair of integral flanges extending in a predetermined direction from the end portions of the side walls or the cover comprising a pair of integral flanges extending in a predetermined direction from the end portions of the main wall;

coupling at least one supporting element to at least one of said bases;

laying said at least one electrical cable into said bases; and

leaning said covers onto said bases so as to substantially close said shielding element.